

COUNTRY	: CZECHOSLOVAKIA	h
CATEGORY	: Chemical Technology, Chemical Products and Their Applications, Leather, Fur, Gelatine.*	
ABS. JOUR.	: Náhrada., No. 19, 1959, No. 70143	
AUTH. OR	: Pešek, V.; Ondráček, J.	
ED. BY	:	
TITLE	: Treatment of Dyed Leather with Evening-Out and Greasing Substances.	
REG. PUB.	: Kozárenství, 1959, 8, No 13, 304-307	
ABSTRACT	: Discussed is the effect of leather composition and its condition on the evenness and depth of dyeing. Ion-active substances tend to even-out the dyeing. In the solutions containing Cr <sup>3+</sup> salts, the anion substances are very effective. In such applications the direct dyes are not changed, while the acidic and other dyes change their hue to a certain extent. The Czechoslovakian preparation "Bilitan" is recommended. The cation evening-out *Tanning Materials, Industrial Proteins.	
CARD	: 1/2	

Country	:	CZECHOSLOVAKIA
Category	:	
Abs. Jour	:	44570
Author	:	<u>Feltor, V.</u>
Institut,	:	
Title	:	Current Status of Leather Finishing by Dyeing
Orig Pub.	:	Kozarstvi, 1958, 8, No 11, 336-335
Abstract	:	No abstract.

H

Card: 1/1

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their Application. Leather, Fur, Gelatin. Tanning Materials. Industrial Proteins. H-35

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17979

Author : Poktor, V.; Ondracek, J.

Inst : Not given

Title : Experiment of Manufacturing White Leather

Orig Pub : Kozatstvi, 1957, 7, No 10, 287-293; No 11, 306-311

Abstract : Presented is the description of tanning methods and finishing processes, and of characteristics of manufactured white leather. The finishing steps in tanning of the already tanned chrome leather with the use of bleaching syntanes (I) are the most suitable materials in the manufacture of white shoe leather top material. The best results were obtained in the finishing steps of tanning with I "irgatan RBL" and "biltan 1115" - the

Card 1/3

H -168

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001239830006-9" H-35  
Chemical Technology, Chemical Products and Their Application. Leather, Fur, Gelatin. Tanning Materials. Industrial Proteins.

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17979

products of condensation of dioxidiphenyl sulphone with formaldehyde. Tanning, utilizing only I, is employed only for the reptile skins. Tanning with sulfochlorides of the paraffinic hydrocarbons ( $C_{28} - C_{30}$ ) results in a white, elastic, soft, light-resistant, greasy to the touch, but high absorptive leather that resembles suado. White leather obtained on the sulfochloride tanning is often finished with Cr salts. White leather obtained from the molammine tanning has a smooth right side surface, soft, compact to the touch, and light-resistant. It is usable for the manufacture of shoe tops and for production of voluros and leather "nubucks". The combined tanning, chrome-molammino is practical. Tanning with zirconium salts (basic sulfato or zirconium oxychlorido)

Card 2/3

PERITA' V.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H-35  
and Their Applications. Leather. Fur.  
Gelatino. Tanning Materials. Industrial Proteins.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 10522.

Author : Pektor, V., Ondracok, J.

Inst : Not given.

Title : Basic Principles of Leather Dyeing.

Orig Pub: Kazarstvi, 1957, No 8, 225-231.

Abstract: Properties are described in the field of application of the basic synthetic dye groups: anionic, cationic, water insoluble, and forming on fibers. Effects are studied of different factors (temperature, time, bath concentration, etc.) on staining: a) of chrome calfskin, cowskin, kid-skin, and pigskin with mixtures of acid and

Card 1/3

247

PEKTOR, V.

"How to affect dyed leather by leveling agents and liquor oils."

KOZARSTVI, Praha, Czechoslovakia, Vol. 8, No. 12, 1958.

Monthly List of East European Accessions (EAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

PEKTOR, VLADIMIR

Czechoslovakia/Chemical Technology - Chemical Products and Their Application. Leather.  
Fur. Gelatin. Tanning Agents. Technical Proteins, I-29

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63786

Author: Pektor, Vladimir

Institution: None

Title: Present State and Development Prospects of Leather Finishing

Original

Periodical: Piehled dosavadniho a nastin budouciho vyvoje pri uprave usni.  
Kozarstvi, 1955, 5, No 3, 45-46; Czech

Abstract: Briefly considered are the current methods of leather finishing and dyeing. Future development of finishing methods should be directed toward increase in range of coating dyes, provision of dyes yielding a flexible strong surface layer without disruption in quality of leather fibers; adoption of pigment pastes consisting of finely dispersed pigments in an aqueous medium, having high covering power, brilliancy and color saturation.

Card 1/1

PEKTOR, VLADIMIR

J Resin finishes for upper leather. Vladimir Pektor and Ladislav Dvorak (Leather & Allied Trades Research Inst., Gottwaldov, Czechoslov.). *Kotofka* 6, 87-9 (1950).—A study was made of the elongation at break of 0.1-mm. films of resins sprayed on glass, and the effect of adding other finishing materials. The elongation of a mixt. of Bu methacrylate 83-Bu acrylate 20 (I) was lowered by adding more than 15% of a casein finish (II); 30% II produced embrittlement. Addn. of a casein-wax mixt. (III) had less effect. Elongation increases with temp. I is stable to ultraviolet. The elongation of pure polymethacrylate resin film (IV) is over 1000%, compared to 600% for I, but drops to 448 and 176%, resp., on adding 10 and 20% II. IV is less temp.-sensitive than I. A mixt. of polymethacrylate 93-dibutyl phthalate 10 (V) has elongation exceeding 1,000%; the elongation is less affected by II and III, and in contrast to I and IV the elongation decreases with increase in temp. The elongations of I and V are adversely effected by adding more than 45% and 28%, resp., of a mixt. contg. TiO<sub>2</sub> 40, casein 52%. Formulas are given for finishing different types of leather. L. Masner.

SOCHA, Josef; BASNAK, Vlastimil; SLAMA, Josef; BURIANEK, Ludevit; KREMR,  
Milan; HRABOVSKY, Vaclav; MICHAEL, Radil, inz.; ONDRACEK, Jaroslav;  
PEKTOR, Vladimir, inz.

Conference of the Czechoslovak Scientific Technical Society on the  
present conditions and outlook for development of the tanning  
industry. Kozarstvi 12 no.12:371-373 D '62.

1. N.p. Svit, Otrokovice (for Socha, Basnak). 2. N.p. Svit,  
Gottwaldov (for Slama). 3. N.p. Kozeluzne, Bosany (for Burianek).  
4. Vyzkumny ustav kozedelny, Otrokovice (for Kremer, Hrabovsky,  
Michael, Ondracek and Pektor).

PEKTOR, Vladimir

Fourth Seminar on Leather Finishing. Kozarstvi 13 no.9:  
272-274 S-163.

1. Vyzkumny ustav kozedelny, Otrokovice.

PEKTOR, Vladimir

New method of leather evaluation from the viewpoint of  
price formation. Kozarstvi 14 no. 3: 69-71 Mr '64.

1. Leather Research Institute, Otrokovice.

PEKTOR, VLADIMIR

Sodium bisulfite is the salting of collagen. Vladimir Pektor and Vladimír Navrátil (Leather & Allied TRADER Research Inst., Gottwaldov, Czech.), Adolaf 8, 149-51 (1958).—Calfskins were salted with 25, 50, and 75% of NaCl contg. 3% Na<sub>2</sub>SO<sub>3</sub> (I). I prevents the appearance of red, violet, and normal salt stains. More than 50% but less than 80% of NaCl may be used. Calfskins, cured for 80, 90, and 180 days were evaluated. The yield and quality of leathers are not impaired. The toxicity of I was studied (cf. C.A. 49, 33163). A gelatin made from skins cured with 1% I contains 130-80 p.p.m. F; from normal skins 20-200 p.p.m. F, the chief source of F being the CuO used in lining, which contains up to 800 p.p.m. F.

L. Masner

CZECHOSLOVAKIA / Chemical Technology. Leather. Fur. H-35  
Gelatine. Tanning Agents. Industrial  
Proteins.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 80012.

Author : Pektor, V., Ondracek, J.

Inst : Not given.

Title : The Manufacture of Leather from Swine Hides for  
Footwear Uppers.

Orig Pub: Veda a vyzk. v prumyslu kozedeln., 1956, 1, 71-96.

Abstract: The peculiarities of a swine hide were studied by topographical sections. The rump part is more dense and durable than the other parts. The distribution of fat is not uniform — the largest accumulation is in paws, the least in the rump. A fat content was determined according to the fatty acids content of the soaps which

Card 1/3

PEKTODP-V

✓ Patent-leather production. Vladimír Pektor (Leather and Allied Trades Research Inst., Gottwaldov, Czech.) Katalist 5, 149-50 (1955).—A description. Cr tannage is done so as to produce a compact, dense grain. Fats are removed from the surface with gasoline before applying the varnish. L. Maser

PEKTOR;V.

CZECH

This finishing of pig upper leather. Vlastimil Pektor  
(Leather & Plastics Research Inst., Čáslavice, Czech.).  
Ceskoslovenské ředitelství pro výzkumy a vývoj v oboru kožišiny a plastů, Čáslavice, Československo, 1971.—The casein-taxed pigments are not suitable. The surface film of leather must not break after 1000 flexes, after drying 72 hrs. at 70° and conditioned 2 hrs. at 65% relative humidity, or after 48 hrs. at -10°. First coating of wet leather pasted on glass plates before drying is recommended. Only synthetic dispersions of acrylates and methacrylates are suitable. The hot-plotting temp. must not exceed 90°. L. Maenzer

PEKTOR, V.

## CZECHI

The influence of chrome salts on the precipitation of proteins by formaldehyde. Vladimír Pektor and Marie Králová (Leather & Plastic Research Inst., Gottwaldov, Czech.). Technol. Leder, 1981, 1, 118-19, 131-4 (1981). - The fixation of protein-based coatings on chrome leather by HCHO and the influence of CrCl<sub>3</sub> and CrOAc<sub>3</sub> of 10, 20, 30, and 40% basicities have been studied. The procedure was to measure the vol. of HCHO after titration, when HCHO and CrCl<sub>3</sub> or CrOAc<sub>3</sub> were added to the protein solns. Two, 2, and 3½ vol. of casein (egg albumin) and blood albumin have been studied. The equilibrium concn. of HCHO is 10%. The best results have been obtained by CrCl<sub>3</sub> of 30% basicity in a molar ratio corresponding to 5 g CrO<sub>3</sub> per l. of protein soln. The soln. of CrCl<sub>3</sub> must not contain free strong, neutral salts. The CrOAc<sub>3</sub> is much less effective. With HCHO alone, the max. efficiency was attained (with 10% soln. of casein) with 73% HCHO on a dry casein basis. With CrCl<sub>3</sub> (30% basicity) the max. effect is obtained with 21% HCHO on a dry casein basis. Lowering the basicity reduces the fixation considerably; increasing the basicity (to 40%) is without influence. The influence of CrCl<sub>3</sub> on the fixation of egg albumin is less pronounced. The max. is with 21% HCHO and 40% basic CrCl<sub>3</sub>. The fixation of blood albumin attains its max. with 41% HCHO and 40% basic CrCl<sub>3</sub>.

L. Masner

PEKTOR, VLADIMIR

CZECHI

The comparison of quality of lightly chromed hide powders of European origin. Vladimír Pektor and Mária Štětková (Leather & Allied Trades Research Inst., Gottwaldov, Czech.). Časoslov. kožařství 2, 12-14 (1952).—Three batches of Czechoslovakian hide powders compared favorably with Freiberg hide powders. Post-war Freiberg, lightly chromed hide powder is notably higher in Cr<sub>2</sub>O<sub>3</sub> than is the war sample. Results of analyses of 3 tanning materials with Czechoslovakian, German, and French prechromed hide powders are given.

L. Masner

PEKTOR V.

CZECH

The evaluation of quality of milling dyes for the leather industry. Vladimír Pektor and Michael Radd (Leather & Allied Trades Research Inst., Gottwaldov, Czech.). Československý kataložní list 2, 51-2 (1952).—The following tests for dyes are recommended: solv. at 20 and 50°, dyeing test, light-, acid-, and alkali-fastness, and the spreading test of powdered dye on a wet filter paper. The dyeing tests are being made on full-grain and on nubuck leathers, and also after rubbing. A table of results of 14 Czechoslovakian dyes is given. L. Manguš

PEKtor, V.

CZECH

The neutralization of chrome-tanned leather. Vlastimil Pektor and Jarmila Ondrášek (Leather & Allotment Research Inst., Gottwaldov, Czech.). Českého. Polstyan. 2, 63-64(1952).—pH of the grain of neutralized leather should be 5.0-5.2 and in the middle of a fresh cut of leather 4.8-4.8. Neutralization by  $\text{Na}_2\text{CO}_3$ ,  $\text{Na}_2\text{SO}_4$ ,  $\text{Na}_2\text{HPO}_4$ ,  $\text{Na}_2\text{PO}_4$ , and  $\text{Na}_2\text{FPO}_4$  cannot be recommended, as the pH of their solns. is too high. The pH of solns. of  $\text{NaHSO}_4$  and  $\text{Na}_2\text{SO}_4$  is too low. Mixts. of salts have been worked out and 60-5% of  $\text{Na}_2\text{SO}_4$  and 10-5%  $\text{NaHSO}_4$ , or 45%  $\text{Na}_2\text{CC}_2$  and 55%  $\text{NaHSO}_4$  are recommended. To these mixts. 20 and 50% of Na phthalate have been added. The neutralization of chrome rods upper leather has been studied. The shrinkage temp. of leather in glycerol before and after neutralization, the pH of the bath at once, and after 10 min. and at the end of the neutralization have been controlled. The mixt. with 20% Na phthalate gave best results.

L. Masner

PEK TUR, Valdimar

CZECH

New methods for the finishing of leather. Valdimir Peltor (Leather & Allied Trades Research Inst., Prague, Czech). *Cerisovka, technická*, 3, 165-6, 177-80 (1953).—A review of current practices of pasting leather, applying resin dispersions, and infrared drying of finishes on side upper leather. Energy consumption data are given for infrared drying. The most advantageous wave lengths are 10,000-13,000 Å. L. Masner

PEKTOR, VLADIMIR

CZECH

/ The production of a lightly chromed hide powder for the analysis of tannins. Vladimír Pektor and Michael Rudil (Leather & Allied Trades Research Inst., Gottwaldov, Czech.), Křesaté 4, 70(1954).—Data on the latest standard batch are given. L. Münzer

PEKTOR, VLADIMIR

Production of book-binding leather and its control.

Vladimir Pektor (Leather & Allied Trades Research Inst., ~~Czechoslovakia~~, Czech.), *Kestatist 4*, 117-20, 130(1954).—Book-binding leathers (I) are classified as parchments, vegetable, and white-tanned. Especially durable I were produced and tested by the  $H_2O_2$  test (Burton, *C.A.* 38, 1091<sup>a</sup>). Most stable vegetable-tanned I am made by sumac; least stable by valonea, distilled quercitroho, spruce, and myrtan exts.; relatively stable by oak, chestnut, and mimosia exts. Sunac I were also stable to the gas-chamber test (Frey and Beebe, *C.A.* 34, 2934<sup>b</sup>). Different kinds of leather were tested. Most stable are calf, steer, hog, and goat skins. The skins are well soaked, unhaired by painting, then limed, bated, and tanned with sumac. The leather is dried by natural or by Neolan-type dyes, and dried below 30°. Protective action of salts (Cheshire, *C.A.* 40, 6802<sup>c</sup>) was also tested. The best results were obtained with 10% KCl soln. The results with ultraviolet light are not directly comparable with sunning. Old book-binding parchments were analyzed. A parchment of the year 1395 contained 2.3 fats, 47.0 hide substance, 4.8  $H_2O$ -sol. matter, and 2.4% ash (1.4%  $CaO$ ). pH of the aq. ext. was 3.0. Parchment of the year 1430 contained 2.2, 82.5, 3.6, and 2.3 (1.3)% of the above constituents. L. Massier

29

The analysis and evaluation of casein finishing pigments.  
Vladimir Dubov. (Balt. Expil. Inst.). Tr. h. Nauki  
Kadruk 23, 107-72(1948) -- For evaluating the use of  
casein-pigment finishes in tanneries, P. dets. the water  
content by distg. the pigment with xylene, the content of  
diluents immiscible with water by the usual distn. of the  
aq. suspension, the NH<sub>4</sub> content by distg. the pigment  
with an excess of NaOH, the inorg. pigments by ashing  
the specimen, the contents of Cl, H<sub>2</sub>O<sub>2</sub>, org. pigments,  
algin by dissolving the specimen in HCl, the content of  
albuminoids, waxes, gumus, oils, and binders from the resi-  
due insol. in HCl. In addn. he dets. the sp. gr. with a  
pycnometer, viscosity by the Fisher method, covering a  
power, stability in acid solns., and the active acidity.

Frank Maresh

## A10-114 METALLURGICAL LITERATURE CLASSIFICATION

1890-1930 1891-95 MAR 1946 C.R.

## IRON &amp; STEEL

1891-95 MAR 1946 C.R.

PEKUN'KIN, V.T.

Vibration grab bucket for taxing apart and stacking piles of  
round lumber. Der. prom. 13 no.6:26-27 Je '64.  
(MIRA 17:6)

PEKUN, Yu. F.

Hornblende from hornblende andesite from the village of Velyatino  
in Transcarpathia. Min.sbor. no.5:347-352 '51. (MLRA 9:12)

1. Gosuniversitet imeni Ivana Franko, L'vov.  
(Transcarpathia--Andesites) (Transcarpathia--Hornblende)

PEKUN, YU. F.

PEKUN, YU. F. - "Mineralogical Investigation fo Pentonite Clays of the Western Oblast's of the Ukraine SSR." Min of Higher Education USSR, L'vov State U imeni Ivan Franko, L'vov 1955 (Dissertations for the Degree of Candidate of Geological-Mineralogical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

PEKUN, Yuriy Filippovich; GAZER, S.L., redaktor; SARANYUK, T.V., tekhnicheskiy  
redaktor

[Mineralogy of bentonite clays of the western Ukrainian provinces]  
Mineralogiia bentonitovykh glin zapadnykh oblastei USSR. [L'vov]  
Izd-vo L'vovskogo univ., 1956. 114 p.  
(MIRA 9:10)  
(Ukraine--Bentonite)

GILLER, Ya.L.; PEKUN, Yu.F.

First All-Union Conference on the X-ray Study of Minerals,  
held in Kiev, September 25-29, 1959. Min.sbor. no.14:475-476  
'60. (MIRA 15:2)

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov.  
(Geology—Congresses)

PEKIN'KIN, V.T.

Mechanical waste unloader. - prom. 11 ne. 5122-23 My '62.  
(Loading and unloading... Equipment and supplies) (MIRA 15:5)

PERUN'KIN, V.T.

Apparatus for remote control measurement of temperature and humidity  
in drying kilns. Der.prom. 9 no.12:20-22 D '60. (MIRA 13:12)

1. Permskiy domostroitel'nyy kombinat.  
(Lumber--Drying) (Remote control)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9

PEKUN'KIN, V.T.

Modernized OK-66 barker. Der. prom. 15 no.1:23-24 Ja '66.  
(MIRA 19:1)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9"

PEKUN'KIN, V.T., inzh.

Suggestions made by efficiency promoters of the Perm Housing  
Construction Combine. Der.prom. 9 no.9:26-27 S '60.

(MIRA 13:9)

(Building--Technical innovations)

PEKUR, N.I.

SHANDALOV, D.A., fel'dsher (Talass); DROZD, V.I., fel'dsher (Minskaya oblast'); PEKUR, N.I., fel'dsher (Krasnodarskiy kray); SHTANCHAYEV, S.TS., pomoshchnik epidemiologa (Kokchetav)

Notes on the article by Feldsher B.N.Tishkov on "Intravenous injections with detached needle." Fel'd. i akush. no.12:36-39 D '54. (MIRA 8:2)  
(INJECTIONS  
intravenous with detached needle, discussion)

PEKUR, N.K., inzh.

Level indicator in Devatov-Moskalev units. Masl.-zhir.prom. 26  
no.5:45 My '60. (MIRA 13:12)

1. Sovkhoz-zavod "Elit."  
(Essences and essential oils) (Level indicators)

PEKUR, V., kapitan 3-go ranga

Even we are against a pattern. Komn. Vooruzh. Sil 46 no.14:67-16  
Jl '65. (MIRA 18:7)

PEKURARU, T.

Universal cutting heads. Stan. 1 instr. 29 no. 7:35-36 J1 '58.  
(Machine tools--Attachments) (MIRA 11:9)

PECHUK, L.M., kand.med.nauk; PEKUROVSKIY, Ye.M.

Changes in the correlation of protein fractions of the blood serum under the influence of tuberculin in pulmonary tuberculosis in children. Probl. tub. no.8:56-62'62. (MIRA 16:9)

1. Iz detskoy kliniki Kiyevskogo nauchno-issledovatel'skogo instituta tuberkuleza imeni F.G.Hanovskogo (dir. A.S.Mamolat) i Boyarskogo detskogo tuberkuleznogo sanatoriya "Barvinok" glavnnyy vrach D.M.Bukhalo).

(BLOOD PROTEINS) (TUBERCULOSIS)  
(TUBERCULIN)

PEKUS-SAKHNOVSKIY, D.N., inzh.

Studying the stability of reinforced concrete bars under  
the prolonged action of a load. Stroi.konstr. no.1:120-134  
'65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut stroitel'nykh  
konstruktsiy Gosstroya SSSR, Kiyev.

PEKUS-SAKHNOVSKYI, D.N., inzh.

Experimental investigation of the bearing capacity of centrally compressed flexible reinforced concrete props during the prolonged action of a load. Stroi.konstr. no.2:98-108 '65,

(MIRA 18:12)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Gostroya SSSR, Kiyev.

ACC NR: AP7005851

SOURCE CODE: UR/0181/66/008/012/3606/3612

AUTHOR: Iglitsyn, M. I.; Pel', E. G.; Pervova, L. Ya.; Fistul', V. I.

ORG: State Scientific Research and Design Institute of the Rare Metal Industry,  
Moscow (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometalli-  
cheskoy promshlennosti)

TITLE: Instability of an electron-hole plasma in a semiconductor, due to the non-  
linearity of the volt-ampere characteristics

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3606-3612

TOPIC TAGS: semiconductor plasma, semiconductor carrier, volt ampere characteristic,  
plasma instability, carrier density, semiconductor conductivity

ABSTRACT: The conditions for the occurrence of instability in a solid-state plasma  
are derived theoretically and the conclusions of the theory are checked experimental-  
ly with measurements on p-type germanium single crystals doped with gold and antimony.  
The tests consisted of determining the volt-ampere characteristics and plots of the  
hole density and hole-capture cross section against the field. The results show that  
in a crystal in which the electron and hole components of the conductivity are non-  
linear (as a result, for example, of the dependence of the recombination cross sec-  
tion on the electric field) oscillations of the conductivity occur. This type of in-  
stability has a resonant character. The theoretical calculations yield formulas for  
the oscillation frequency and for the critical field. The experimentally measured

Card 1/2

ACC NR: AP7005851

period of the oscillations and of the critical field for a germanium crystal doped with gold agreed with the calculated values. The electronic component of the conductivity in such a crystal is shown to have a negative differential resistance. The instability is connected with nonlinearity of the volt-ampere characteristics, and has a resonant character. The authors thank A. Ya. Shul'man, O. V. Konstantinov, V. I. Perel', and D. G. Andrianov for a discussion of the results. Orig. art. has: 3 figures and 15 formulas.

SUB CODE: 20/ SUBM DATE: 13Jun66/ ORIG REF: 002/ OTH REF: 003

Card 2/2

L 09343-77 U(1)/M(1)F(1)(a)/(b) (c) (d) RT/SD  
ACC NM: AR000000 SOURCE CODE: UN/0000/00/000/003/001/R032

AUTHOR: Fel', E. G.

ORG: Tashkent State University im. V. I. Lenin (Tashkentskiy gosudarstvennyy universitet)

TITLE: Dependence of the lifetime on the minority carriers in long diodes on the injection level

SOURCE: AN UzSSR. Izvestiya. Seriya Fiziko-matematicheskikh nauk, no. 3, 1966, 81-82

TOPIC TAGS: semiconductor carrier, pn junction, silicon semiconductor, volt ampere characteristic, carrier lifetime, minority carrier

ABSTRACT: To determine the relation between the lifetime of the minority carrier in a diode and the appearance of a negative-resistance section on the volt-ampere characteristic, the author determined the lifetime in long silicon diodes with S-shaped volt-ampere characteristic, made of gold-doped n-type silicon. The resistivity of the base after compensation was 50 - 300 ohm-cm. The p-n junction was produced by fusing-in an aluminum wire, and the base contact by fusing-in gold with antimony. The resultant p<sup>+</sup>-n-n<sup>+</sup> structure had a base thickness from 10 to 100  $\mu$ . The lifetime of the minority carriers was determined by applying a voltage pulse (400 nsec) in the forward direction, followed immediately (within 5 nsec) by an inverse pulse (100 nsec), and observing the transient in a stroboscopic oscilloscope. The results show that the lifetime of the holes (minority carriers) remains constant on the negative-resistance

Card 1/2

L 09343-67

ACC NR: AF6028510

section and has no bearing on the occurrence of a negative-resistance section on the volt-ampere characteristic. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 16Jul64/ ORIG REF: 001/ OTH REF: 001

Contd 2/2

PEL, Vladimir

A mounting system by means of which disruptive discharges in  
neon tubes are avoided. Elektroenergiia 15 no.12/22-23 P '64.

PELACH, A.; HALKO, J.

Perforation of the interventricular septum in myocardial infarct. Bratisl. lek. listy 2 no.12: 723-732 '63

1. Interne oddelenie Vojenskej nemocnice v Bratislave;  
veduci: MUDr. A.Pelach.

\*

PELACH, Alexander, Lt Col, Dr, Bratislava Military Hospital

Author of article "Our Experiences with Ulcerous Diseases," dealing  
with the treatment of ulcers among army personnel.  
(VZL, Oct 54)

SO: Sum. 436, 30 March 1955

PELAGECHA, Dar'ya Il'inichna [Pelagecha, D.I.], Geroy sotsialističeskogo truda, zvenevaya; LITVIN, S.G.[Litvyn, S.H., kand. esal'khoz. nauk, otv. red.; MUSNIK, N.I., red.; ZELENKOVA, Ye.Yu. [Zelenkova, YE.IU.], tekim. red.

[Friendly team; a sketch as told to I.O.Kornienko] Druzhba lanka; literaturnyi zapys I.O.Kornienka. Kyiv, 1961. 41 p. (Tovarystvo dlia poshyremnia politychmykh i naukovykh znan' Ukrains'koi RSR. Ser.5, no.15) (MIRA 15:1)

1. Kolkhoz imeni Stalina Chernobil'skogo rayona, Kiyevskoy oblasti (for Pelagecha).

(Ukraine---Agriculture)

PELAGESHA, V., inzh.

Cast-iron baffle plates for KV-3 boilers. Rech, transp. 19 no. 12:42-  
43 D '60. (MIRA 13:12)  
(Boilers, Marine—Safety appliances)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9

KANDRAC, M.; PELAK, Z.

Determination of pregnandiol in so-called pregnandiol test. Cas. lek.  
cesk. 92 no.28:785-786 10 July 1953. (CIML 25:1)

1. Of the Third Internal Clinic (Head--Prof. J. Charvat, M.D.), Prague.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9"

KANDEAC, M.; MARESOVA, Z.; PELAK, Z.; KOPRIVOVÁ, A.

Hepatopathy, cholecystopathy and 17-ketosteroids elimination  
by urine. Vnitřní lek., Brno 1 no.7:498-506 July 55.

1. Z III. vnitřní kliniky KU v Praze, prednosta Akademik  
Josef Charvat. Praha II-499, Státní fakultní nemocnice.

(URINE

17-ketosteroids in liver & gallbladder dis.)

(LIVER, diseases

urinary excretion of 17-ketosteroids.)

(GALLBLADDER, diseases

urinary excretion of 17-ketosteroids.)

SIPRAK, J.; BLAIS, N.

Representation of cultural interest in the labor department.  
Cesk. gynek. 29 a. 6674-177. Brno.

1. M. gyn.-px. Clin. fak. Lek. Karlovy Univerzity v  
Praze (prednosta prof. dr. R. Lecka, Praha).

GASTEV, N.S.; PELAKHOVA, Ye.N.

The influence of light and nitrogen compounds on the alkaloid content of  
belladonna. Agrobiologiya '53, No.1, 94-5. (MLRA 6:2)  
(CA 47 no.22:12531 '53)

1. Pyatigorsk Pharm. Inst.

PELANEK, V.

Juraj Bartos' Zaklady upravnicke elektrotechniky (Fundamentals of Electrical Engineering in Ore and Coal Preparation); a book review.

P. 32. (ELEKTROTECHNIK) (Praha, Czechoslovakia) Vol. 13, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, May 1958

PELANEK, V.

Electric equipment of coal preparation plants.

p. 327 (Elektrotechnik) Vol. 12, no. 10, Oct. 1957, Praha, Czechoslovakia

SC: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VCL. 7, NO. 1, Jan. 1958

PELANT, I., inz., C.Sc.

Special railways. Zel dop tech 9 no.7:211-215 '61.

PELANT, I.

Study of the movement of rail vehicles by means of electromechanical analogy.  
p. 262

ZELEZNICNI LOPRAVA A TECHNIKA. (Ministerstvo dopravy) Praha, Czechoslovakia.  
Vol. 7, no. 9, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 12, Dec. 1959  
Uncl.

PELANT, Ivc, inz.

Modern undercarriage, a product of research. Doprava  
no. 5\*333-340 '64.

PELANT, V. HOSEK, K.

Industrial explosives of Czechoslovak origin. p. 194.

(Rudy. Vol. 5, no. 6, June 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

Pelant Vojtech

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and  
Their Application - Explosives, Pyrotechnic  
Compositions. Chemical Protection Means.

H-21

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 9180

Author : Pelant Vojtech, Hosek Karel

Inst : -

Title : Czechoslovak Industrial Explosives.

Orig Pub : Rudy, 1957, No 6, 194-200

Abstract : A classification of industrial explosives is given and their properties are described. A survey is made of industrial nitroglycerin, ammonium nitrate and trotyl explosives, used in Czechoslovakia. Tables are included in which their properties and forms of packaging are listed. Ways of further development of the industry of explosives are set forth.

Card 1/1

ZAGORSKI, Wladyslaw, doc. dr. med; GLOWINSKI, Zygmunt; OSIECKI, Tadeusz;  
PKLASA, Jerzy

Thromboelastographic tests in patients operated on for  
cholelithiasis. Pol. tyg. lek. 20 no.7:245-248 15 Febr.

1. Z I Kliniki Chirurgicznej i Centralnego Szpitala Polowego  
Wojskowej Akademii Medycznej (kierownik: doc. dr. med. Wladyslaw  
Zagorski).

PELAU, T

TECHNOLOGY

PERIODICAL: INDUSTRIA TEXTILA, Vol. 9, no. 11, Nov. 1958

PELAU, T. Influence of the quality of products on the profits of  
enterprise. p. 409

Monthly List of East European Accessions ("EAA") LC Vol. 8, No. 4  
April, 1959, Unclass

PELAU, T.

The advantages of using modern equipment for preparing warp for Raschel knitting machines. p. 58.

INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Industriei Udostre) Bucuresti, Rumania. Voll 10, no. 2, Feb. 1959.

Monthly Lists of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

PELAU, T., ing.; ZOICA, D.

Determining the width of the calendering for knitwear. Ind  
text Rum 13 no.7:276-284 J1 '62.

1. Institutul International de Sudura "Tricoul rosu", Arad.

PELAU, T., ing.

Modernization of equipment and specialization of the mills,  
principal factors of the increase of labor productivity.  
Ind text Rum 10 no.9:356-362 S '59.

1. Fabrica "Tricoul Rosu," Arad.

PELAU, T.

Automatic electric stopping device in sectional warping machines used for knitting.  
p. 156.

INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din  
Romania si Ministerul Industriei Usoare) Bucuresti, Rumania. Vol. 1C, no. 4,  
Apr. 1959.

*vol 8*

Monthly list of East European Accessions (EEAI) IC, no. 8, Aug. 1959

Uncl.

PELAU, T.

Application of the Prod-Synchronous method in the manufacture of knit goods in  
the Tricoul Rosu Enterprise in Arad. p. 267. Industria Textila. Bucuresti. Vol. 6,  
Aug. 1955.

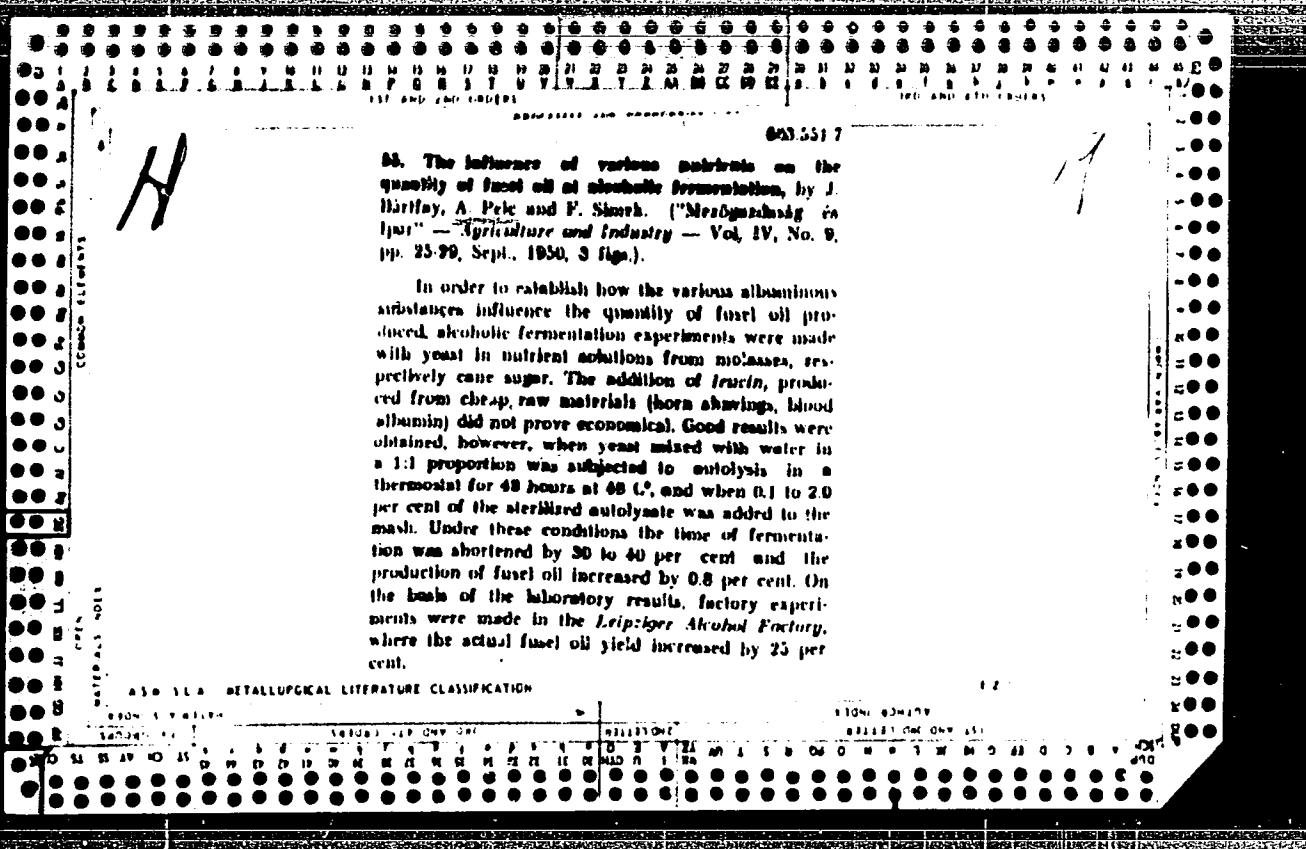
SOURCE: East European Accessions List (EEAL), LC. Vol. 5, No. 3, March 1956.

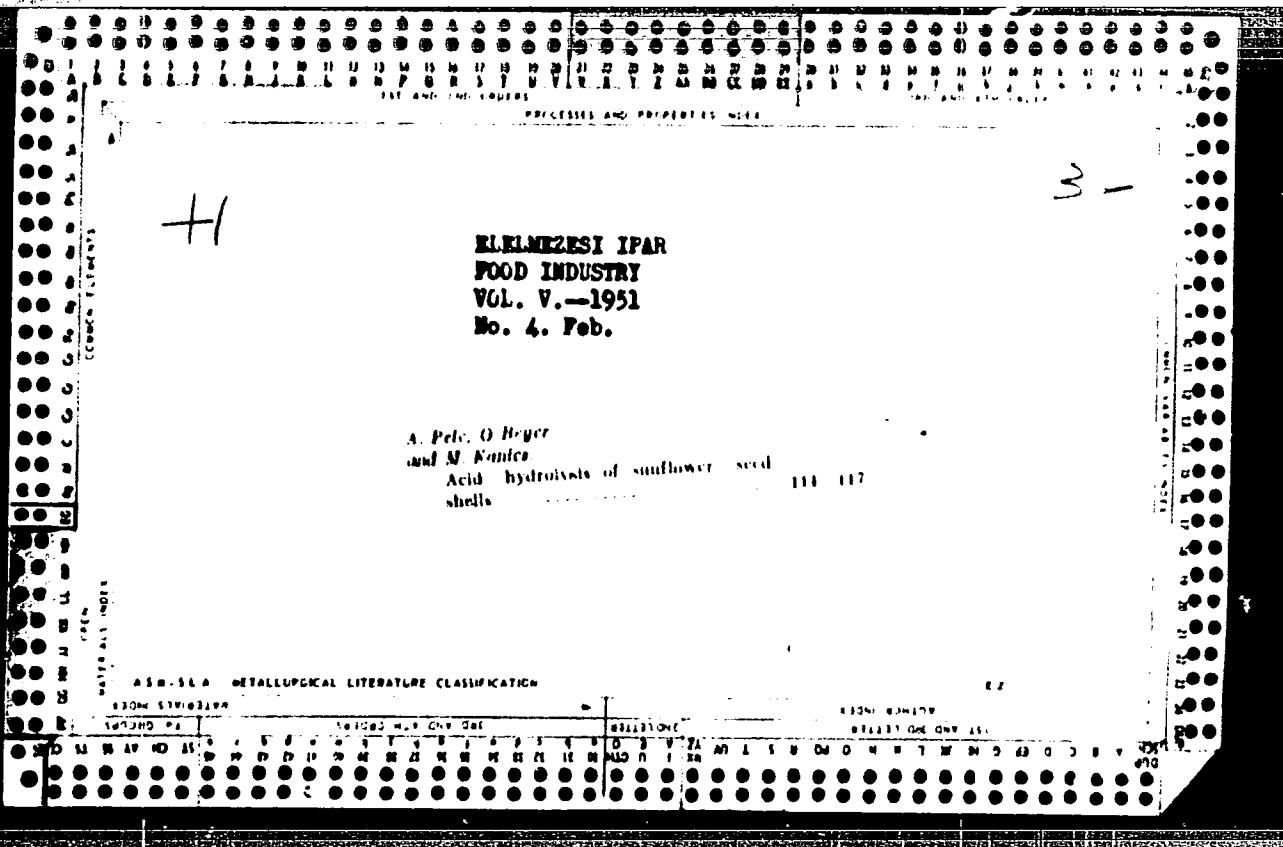
PELC, A: SNEK, F.

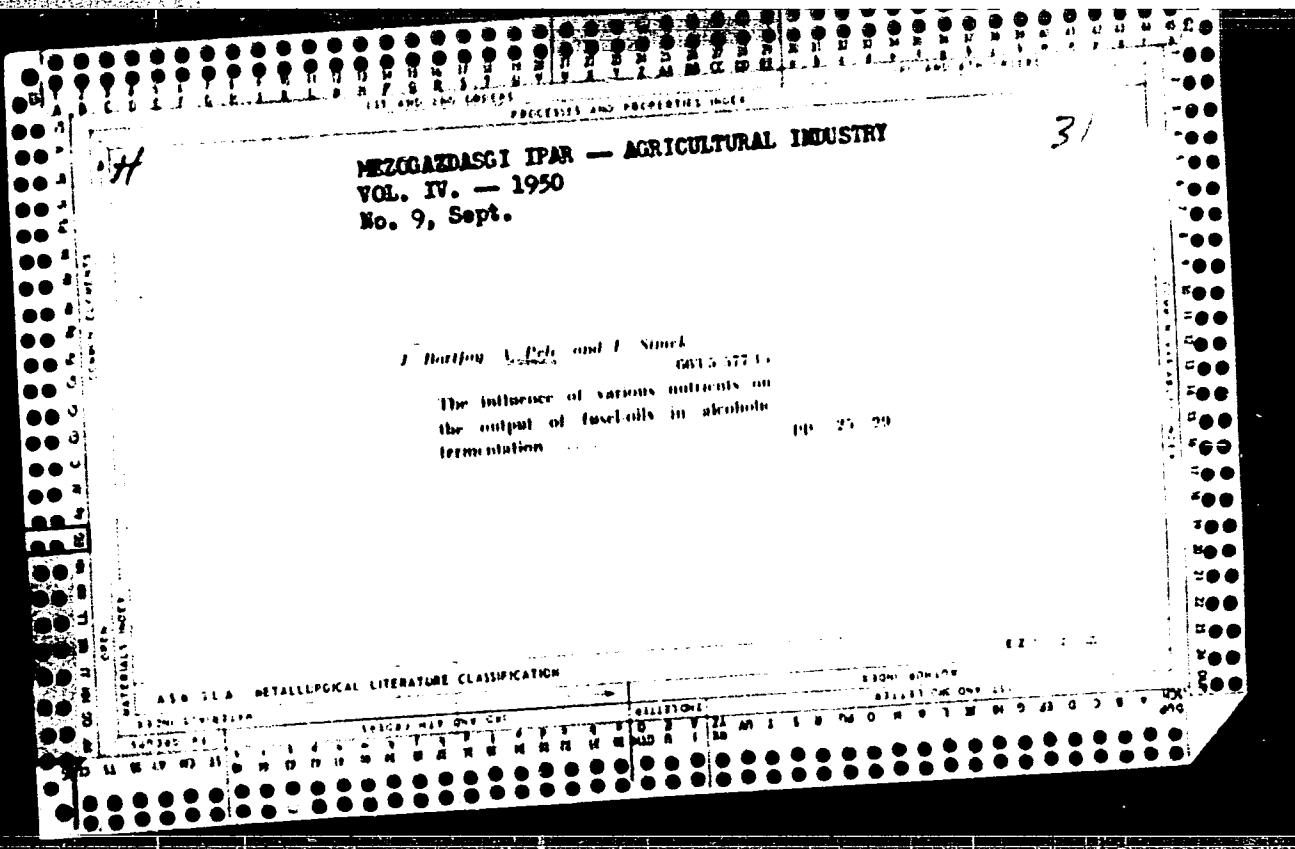
Effect of the salt content of media on the growth of foreign yeasts. p. 374.  
Vol 9, no. 9, Oct. 1955. ELEMEZETI TÁR. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

12. Investigating the methods of purifying boric acid. In A. Pelt and M. Kainos, "Metallurgy in Japan," Agriculture and Industry Vol. IV, No. 7, pp. 20-21, July 1950.	
<p>A process was elaborated for the manufacture of boric acid and sodium borate around the existing chemical technological equipment in this field. The boronized boric acid made which contains most of the factor used as calcium borate is neutralized with lime and an equivalent amount of magnesium sulfate is added. The residue that has been formed is removed together with the spent residue by filtering at 80-60° C. It is very slow to the precipitation of magnesium borate. After this the filtrate is evaporated, crystallized, redissolved in hot water, clarified with active carbon and decomposed by adding lime milk. The calcium borate remains in a dissolved state, the magnesium hydroxide is precipitated and recovered for further use by dissolving it in sulphuric acid. These tests proved the suitability of this method. Five additional operational phases are required for producing soluble boric acid by this method as compared to the present preparation of technical boric acid. However, this increase in the cost of production is largely compensated by the quality of the product, a 90 per cent soluble boric acid. It is important that the initial purification is carried out with pure boric acid for maximum yield. The methyl borate distilling process is capable of the most reliable method for purifying chemically pure boric acid.</p>	
(7)	
COMING REPORTS ARE AS FOLLOWS:	







*Pelc, A.*

33. Report on the experiments for processing marc from grapes -- Beszamolo a szilártorkoly felüli lőszásara vonatkozo kísérletekrol -- by J. Bartfay and A. Felt, (Food Industry - Szellkészeti Ipar - Vol. V, No. 3, pp. 81-85, March 1951, 5 tabs.)

Samples of grape marc taken from four different regions of Hungary were found to contain 1.7 to 4.7 per cent alcohol and 1.4 to 6.15 per cent tartar. Experiments performed in a "Rapid" apparatus showed that frequent cloggings occur due to the accumulation of grape seeds. In laboratory tests the optimal temperature of alcohol extraction from marc ranged from 30° to 40°C. The alcohol yield can be increased by soaking the marc prior to lixiviation. Increasing the duration of lixiviation did not promote an appreciable rise in alcohol yield. In practice two processes may be applied: One consists in producing dilute tartar by utilizing the "Rapid" apparatus, and in precipitating tartaric acidic calcium from this solution, and the other in treating the marc in the diffusion apparatus and separating the tartar from the concentrated solution by cooling. A possibility also exists for the direct production of pure tartaric acid from raw tartar without the formation of calcium tartrate by applying ion exchangers.

(1)

SIMANKOVA, Ludmila, inz.; PELC, Antonin

Instrument for the measurement of temperature coefficients of capacities. Sdel tech 11 no.4:125-126 Ap '63.

PELC, R.

HUNG.

NG.

93. The alcoholic fermentation of molasses — A  
molassák szerves eredménye — A. Pels, F. Simák and L. Vámos.  
Vigyázó (Food Industry and Chemicals) — Vol. 7,  
1953. No. 9, pp. 273—279, 11 figs., 1 tab.)

For developing the technology of producing alcohol from molasses the fermentation process was examined in great detail. The inversion of sucrose during fermentation was studied. It was established that inversion occurs prior to fermentation. The invertase activity was found to be independent of the quality of the sugar to be fermented and under certain conditions invertase exerts its effect outside the cell. Glucose and fructose formed from sucrose by inversion are fermented by baker's yeast at the same rate. These results were obtained by paper chromatography. The influence of the addition of molasses on the alcohol yield and yeast cell growth was studied. It was found that yeast strives to attain a certain limit of saturation in the fermenting medium and inasmuch as the quantity of yeast is reduced, increased sprouting may be observed even with an alcohol content of over 5%. Those circumstances which serve to inhibit the growth of yeast also serve to reduce the alcohol yield.

PELC, A.

"Capacity of yeast to ferment dextrin." Elelmezesi Ipar, Budapest, Vol. 8, No. 4, Apr. 1954,  
p. 118.

SO:Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

PÉLC, A.

(3)

663.263

61. Results obtained by up-to-date methods of utilizing grape marc in experiments and in pilot plants.

— *Beszámoló a részben környezetileg károsító alkohol kivonásáról és felhasználásáról — J. Birtay and V.A. Felsz. (Food Industry — Élelmiszeri Ipar — Vol. 7, 1953, No. 2, pp. 47–52, 3 fig., 6 tabs.)*

✓ Experiments conducted in the laboratory of the Research Institute of the Fermentation Industry have proved the diffusion process to be the only up-to-date method for the utilization of grape marc. The diffusion is effected most advantageously at 80°C and at a 100 or 150% draw-off with a 20 min timing: 95% of the alcohol and 75% tartar contained in the marc can thus be extracted. Moreover edible oil can be obtained from the grape seeds discharged from the diffusion apparatus. A further advantage of the diffusion process is that the alcohol distillate bears a greater resemblance to brandy than to marc, this increases its value. J. B.

Hungarian Technical Abst.  
Vol. 6 No. 1  
1954

PELC, A.

Simek, F.; Pelc, A.

"Istvan Kormendi, a Stakhan ovich in the Confectionery Industry." p. 344.  
(Elemezesi Ipar. Vol. 5, no 11 Nov. 1951. Budapest)

"Role of the Exposure of Yeast to Air in the Process of Production." p. 340

SO: Monthly List of East European Accessions, Vol 3, No 6 Library of Congress, Jun 54, Uncl.

PELG, A. ; SILER, F.

"Utilization of the leftovers of the brewing industry in producing certain yeast",  
p. 195, (LÉLÉKÉZSI IPAR, Vol. 7, no. 6, June 1950, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2, No. 11, Nov. 1953, encl.

Z/014/65/000/004/C01/001  
E192/E382

AUTHORS: Šimáňková, Ludmila, Engineer and Palc, Antonín

TITLE: Measuring set for temperature coefficients of capacitors

PERIODICAL: Sdělovací technika, no. 4, 1963, 125 - 126

TEXT: The instrument provides a means of measuring the positive temperature coefficients of capacitors in the range of 1 - 500 pF with an error of  $2 \times 10^{-6} / ^\circ\text{C}$  or  $\pm 10\%$ . The coefficient of the measured capacitor is determined by beating two high-frequency signals, one of which is dependent on the thermal change in the capacitance while the other is constant. The measured capacitance is an integral part of the resonance circuit of the measuring oscillator, whose temperature is kept constant; on the other hand, the capacitor itself is situated in a special chamber whose temperature is carefully controlled. The change in the beat-frequency is directly proportional to the change in the measured capacitance. The oscillators used in the equipment are of the type shown in Fig. 1, where the measured capacitance  $C_x$  is connected in series-parallel with the capacitances  $C_v$ ,  $C_g$  and  $C_n$ . The Card 1/2

Measuring set for ....

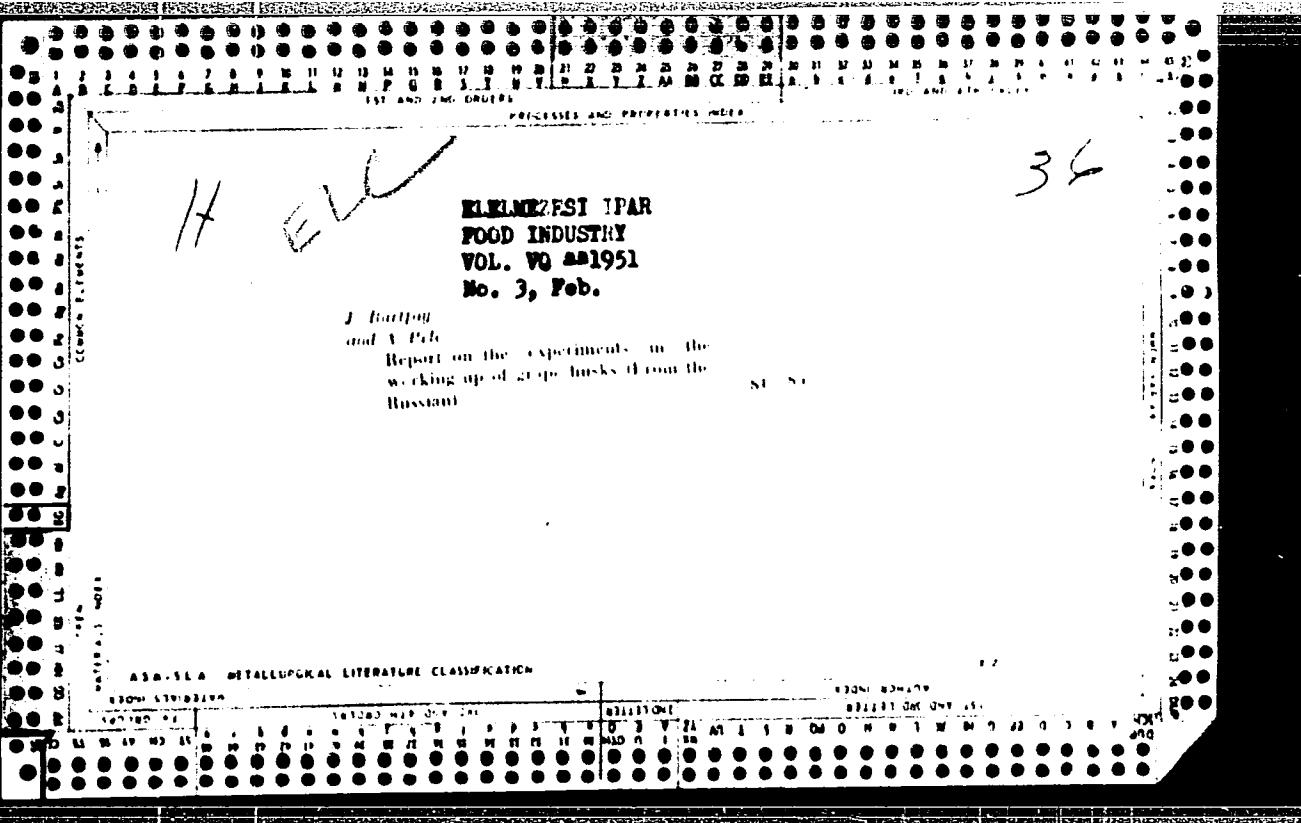
Z/014/63/000/004/001/001  
E192/E382

thermal coefficient is expressed by:

$$Tk_c = \frac{2\Delta f}{f \cdot \Delta t} \cdot K \quad (2)$$

where  $\Delta f$  is the measured frequency change,  $f$  is the mean frequency and  $\Delta t$  is the measured temperature difference. The coefficient  $K$  is dependent on the capacitance of the circuit and is approximately equal to unity. However, since it depends on  $C_x$ , it is necessary to provide three capacitance ranges ( $1 - 10 \text{ pF}$ ,  $10 - 100 \text{ pF}$  and  $100 - 500 \text{ pF}$ ), each of which is furnished with its own oscillator. The oscillators operate between 7 and 20 Mc/s. One of the causes of errors in the measurement system are the leads between the test-temperature chamber and the resonance circuit of the oscillator. This error was reduced to an acceptable value by making the leads from silver-coated invar wire sealed in silica glass. The stability of the oscillators of  $5 \times 10^{-6}/\text{h}$ , was achieved by placing them in a suitable thermostat. There are 4 figures.

Card 2/2



CZECHOSLOVAKIA

PELC, B; HODKOVA, J; HOLUBEK, J

Research Institute for Natural Drugs, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 3, March 1966, pp 1363-1370

"Steroid derivatives. Part 38: Preparation of 1 $\alpha$ (2 $\beta$ )-oxides  
of androstane derivatives and their reactions."

CZECHOSLOVAKIA

PELC, B; HODKOVA, J

Research Institute for Natural Drugs, Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications,  
No 1, January 1967, pp 410-418

"Steroid derivatives. Part 44: Further reactions of 1 $\alpha$ -,  
2 $\alpha$ -epoxy-3-ketones of androstane series."

JELLINEK, J., MIKULASKOVA, J.; PELC, B.

Research Institute for Natural Drugs, Prague, Czechoslovakia

Berlin, Acta Biologica et Medica Germanica, No.13, 1964, pp 204-208.

"The Action of Some Steroid Compounds on  $HgCl_2$ -Nephrosis in Mouse and Rat Kidney"

PELC, B.; HERMANEK, S.

Steroid derivates. Part 15: Dehydrobromination experiments on the  
6-bromo-7-ketocholane derivates. Coll Cs Chem 27 no. 9:2223-2226 S '62.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.

PELC, B.

Steroid derivatives. V. 3-methyl-substituted androstane derivatives.  
Coll Cz Chem 25 no.6:1624-1631 Je '60. (EEAI 10:9)

1. Forschungsinstitut fur Heilpflanzen, Prag.  
(Steroids) (Methylandrostane)

PELC, B.; HERMANEK, S.; HOLOUBEK, J.

Steroides. Part 13: Dehydrobromination of 2,4-dibrom-3-keto- $\Delta^5$ -androstan-derivates in dimethyl in dimethylformamide. Coll Cz Chem 26 no.7:1852-1861 Jl '61.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.

(Bromination) (Formamide)

PELC, B.

Steroid derivatives. Part 19: Preparation of the 19-nortestosteronophenylpropionate from estrone. Coll Cz Chem 27 no.11: 2706-2708 N '62.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.



PELC, B.

The Wittig reaction. p. 177.

EHEMICKE LISTY. (Ceskoslovenska akademie ved. Chemicky ustav) Praha,  
Czechoslovakia, Vol. 53, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol 8, no. 11, Nov. 1959  
uncl.

PELC, B.

"Reaction of  $3\beta$ -acetoxy- $5\alpha$ ,  $6\beta$ -dibromocholestan with silver compounds."

p. 946 (Institute of Applied Physics - Czechoslovak Academy of Science)  
Vol. 51., No. 5, May 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

PELC Bummi

4  
1/2

Reactions of  $\beta$ -acetoxy- $\alpha$ , $\beta$ -dibromocholestanate with silver compounds. *Biochim. et Biophys. Acta (Vienna)* 1957, 14, 117 (from Biochem. Z. 31, 636-51 (1957)). -  $\beta$ -Acetoxy- $\alpha$ , $\beta$ -dibromocholestanate (**I**) and Ag<sub>2</sub>CrO<sub>4</sub>, Cr<sub>2</sub>O<sub>3</sub> gave  $\beta$ -acetoxy- $\alpha$ -hydroxy- $\beta$ -nrostanate (**II**). **I** and Ag<sub>2</sub>O gave a mixt. of  $\beta$ -acetoxy- $\beta$ -hydroxy- $\delta$ -cholestane (**III**) and  $\beta$ -hydroxy- $\beta$ -acetoxy- $\delta$ -cholestane (**IV**). **I** and Ag<sub>2</sub>OAc gave **IV**. Shaking a suspension of 4 g. **I** and 4 g. Ag<sub>2</sub>CrO<sub>4</sub> in 50 ml. Me<sub>2</sub>CO 50 hrs. at room temp., adding 1.4 g. Cr<sub>2</sub>O<sub>3</sub> in 5 ml. H<sub>2</sub>O and 0.6 ml. H<sub>2</sub>SO<sub>4</sub>, shaking the悬液 2 hrs. at 25°, filtering off the salts,  $\times$ vapg., the filtrate *in vacuo* at 50°, dilg. the residue with H<sub>2</sub>O,  $\times$ vapg. with 100 ml. Et<sub>2</sub>O, washing the ext. with H<sub>2</sub>O, NaHCO<sub>3</sub>, and H<sub>2</sub>O, evapg. the Et<sub>2</sub>O, and refluxing the residue (3.2 g.) with 20 ml. petr. ether (b. 40-60°), gave 650 mg. **II**, m. 233-4° (from Me<sub>2</sub>CO). Shaking 186 g. **I** and 150 g. Ag<sub>2</sub>O in 3.6 l. Me<sub>2</sub>CO and 500 ml. H<sub>2</sub>O 10 hrs. at room temp., filtering off the Ag salts, evapg. the filtrate, dilg. with H<sub>2</sub>O,  $\times$ vapg. with Et<sub>2</sub>O, evapg. the ext., and chromatographing the residue over 2.5 kg. Al<sub>2</sub>O<sub>3</sub> yielded, by elution with C<sub>6</sub>H<sub>6</sub> and H<sub>2</sub>O, 850 mg. **II**, m. 187-90° (from Me<sub>2</sub>CO-CH<sub>2</sub>Cl<sub>2</sub>), [α]<sub>D</sub><sup>20</sup> +60°, 3 g. **IV** (by elution with Me<sub>2</sub>CO), m. 163-4° (from Me<sub>2</sub>CO), [α]<sub>D</sub><sup>20</sup> -85°, and a residue whose acetylation with Ac<sub>2</sub>O in C<sub>4</sub>H<sub>10</sub> yielded 10.8 g.  $\beta$ , $\beta$ -diacetoxy- $\delta$ -cholestene (**V**) and 900 mg.  $\beta$ , $\beta$ -diacetoxy- $\alpha$ -hydroxycholestanate (**VI**), m. 163-5°, [α]<sub>D</sub><sup>20</sup> -45°.

PELC, Bohumil

Reducing 25 g. I and 25 g.  $\text{AgO}$  100 min. in 1250 ml.  $\text{Et}_2\text{O}$  and 75 ml.  $\text{H}_2\text{O}$ , filtering, evapg. the solvent in vacuo, acetylating the residue with 20 ml.  $\text{Ac}_2\text{O}$  and 30 ml.  $\text{C}_6\text{H}_5\text{N}$ , adding 50 ml.  $\text{MeOH}$ , and refluxing the mixt. gave 4.3 g. V and 300 mg. *cholesteryl acetate*. Shaking 6 g. I and 10 g.  $\text{AgOAc}$  in 200 ml.  $\text{Me}_2\text{CO}$  12 hrs., filtering off the salts, evapg. the solvent, and chromatographing the residue gave 690 mg. IV. Adding a soln. of 10 g. I in 100 ml.  $\text{Et}_2\text{O}$  to 11.4 g.  $\text{AgOAc}$  in 50 ml.  $\text{C}_6\text{H}_5\text{N}$ , reducing the stirred mixt. 10 hrs., adding 10 g.  $\text{Ac}_2\text{O}$ , filtering, evapg. the solvent, and crystg. the residue from  $\text{Me}_2\text{CO}$  gave 3.1 g. V. Hydrolysis of III, IV, and V with a mixt. of KOH in  $\text{H}_2\text{O}$ ,  $\text{MeOH}$ , and  $\text{CHCl}_3$  yielded  $\beta\beta,4\beta$ -*dihydroxy-5-cholenate* (VII), m. 174-0° (from  $\text{Me}_2\text{CO}$ ),  $[\alpha]_D^{25} -66^\circ$ . Hydrogenation of V over  $\text{PtO}_2$  in  $\text{AcOH}$  gave  $\beta\beta,4\beta$ -*diacetoxycholestane*, m. 133-5°,  $[\alpha]_D^{25} -0^\circ$ . Reducing VII with  $\text{AcOH}$  gave V and  $\beta\beta,5\beta$ -*diacetoxy-4-cholestene* (VIII), m. 128° (from  $\text{MeOH}$ ). Reduction of II with LiAlH<sub>4</sub> in  $\text{Et}_2\text{O}$  yielded  $\beta\beta$ -*acetoxy-5\beta,10\beta-*dihydroxy-cholestane*, whose acetylation gave VI which was transformed to VIII by treatment with  $\text{SOCl}_2$ .*

M. Hrubík

✓  
2/2  
M. H.  
a/b.

ANALYST: J. M. H.

IVLIC, B.

Research Institute for Natural Drugs, Prague,

Prague, Collection of Czechoslovak Chemical Literature,  
No 10, 1965, p. 376-377

"Styrene Derivatives. XIII. 1-alpha-Methyl-beta-phenyl-alpha-  
Aromatic Derivatives Substituted at C(5) and C(17)."

PELC, B.

"Reaction of  $3\beta$ -acetoxy- $5\alpha$ ,  $6\beta$ -dibromocholestan with silver compounds.  
In German."

p. 1457 (Collection of Czechoslovak Chemical Communications. Vol. 22, no. 5,  
Oct. 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EAI) 1C, Vol. 7, no. 7, July 1968

PELC, B.

Steroid derivatives. Pt. 24. Coll Cz Chem 29 no.4:1029-1034  
Ap '64.

1. Research Institute of Natural Drugs, Prague.

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G-3  
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57563.

Author : Pelc B.

Inst : Not given.

Title : Reactions of  $5\alpha, 6\beta$ -Dibromocholestanol- $3\beta$ -Acetate with Silver Compounds.

Orig Pub: Chem. listy, 1957, 51, No 5, 946-951.

Abstract: 4 gr of  $5\alpha, 6\beta$ -dibromocholestanol- $3\beta$ -acetate (I) is mixed by shaking with 4 gr of  $\text{Ag}_2\text{CrO}_4$  in 50 cc of acetone for 50 hours and then for 2 hours with a solution containing 1.4 gr of  $\text{CrO}_3$  in 5 cc of water and 0.4 cc of concentrated  $\text{H}_2\text{SO}_4$ . After usual treatment, 0.65 gr of 3-acetatecholestanediol- $3\beta, 5\alpha$ -ona-6 (II) with a melting point of 233-234°

Card 1/6

65

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G-3  
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57563.

Abstract: ing point and  $[\alpha]^{20}_D = -45^\circ$ . A mixture of 25 gr of I and 25 gr of  $\text{Ag}_2\text{O}$  in 1250 cc of alcohol and 75 cc water is boiled for 100 minutes and after analogical treatment and acetylation obtain 4.3 gr of V and 0.3 gr cholesterine acetate of  $110^\circ$  melting point (benzene). A mixture of 5 gr of I and 10 gr of silver acetate in 200 cc of acetone is mixed for 12 hours; after treatment and chromatographing, 0.68 gr of IV (chloroform) are isolated. A mixture of 10 gr I, 100 cc of ether, and 11.4 gr of silver acetate in 40 cc of pyridine is boiled for 10 hours. After acetylation of the

Card 4/6

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001239830006-9"  
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57563.

Abstract: reaction product, 2.4 gr of V are obtained. Boiling of 7 gr of V (or III, or IV) for 1 hour with a mixture of 3 gr KOH, 3 cc  $\text{H}_2\text{O}$ , 100 cc  $\text{CH}_3\text{OH}$ , and 20 cc  $\text{CHCl}_3$  yields 5.7 gr of  $\Delta^5$ -cholestendiol- $3\beta,4\beta$  (VII) of  $174-176^\circ$  melting point (from acetone),  $[\alpha]^{20}_D = -66^\circ$ . Through the hydration of 1 gr of V over Pt in 50 cc of acetic acid, 300 mg of cholestandiol- $3\beta,4\beta$ -diacetate of  $133-135^\circ$  melting point (from acetone) and of  $[\alpha]^{20}_D = -9^\circ$  are prepared. A solution of 100 mg VII in 5 cc of  $\text{CH}_3\text{COOH}$  after boiling for 10 minutes yields 65 mg of  $\Delta^4$ -cholestendiol- $3\beta,6\beta$ -diacetate (VIII) of  $123-126^\circ$  melting point. VIII may also be synthesized from IV by using an analogical method. In the  $\text{CH}_3\text{COOH}$

Card 5/6

PELC, B.

"Reaction of  $3\beta$ -acetoxy- $5\alpha$ ,  $6\beta$ -dibromocholestan with silver compounds."

p. 1457. (Collection of Czechoslovak Chemical Communications. Praha,  
Czechoslovakia.)

Monthly Index of East European Acquisitions (EEAI) LC. Vol. 22, no. 5, Oct. 1957

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9

Pcl C, B

Oxidation of 3 $\beta$ -Hydroxycholestan-5-one acetate and benzoate with selenium dioxide. Z. Hodinat and R. Polc.  
Collection Czechoslov. Chem. Commun., 21, 204 (1956)  
(in English).—See C.A. 50, 5704a. B. J. C.

PM 322

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830006-9"

L 33203-16

ACI NO: APO23817

SOURCE CODE: CZ/0014/66/000/001/0021/0022

AUTHOR: Lusman, Ctirad (Engineer); Pala, Frantisek (Engineer)

58

(B)

ORG: none

TITLE: Half-sine pulse generator

SOURCE: Sdelovaci technika, no. 1, 1966, 21-22

TOPIC TAGS: pulse generator, pulse amplitude, pulse width modulation

ABSTRACT: The article describes the principle of a half-sine pulse generator and presents its calculations and circuit, with numerous illustrations of its use in various applications. The pulse amplitude and width can be varied within broad limits. Orig. art. has: 9 figures and 8 formulas. [JPRS]

SUB CODE: 14, 09 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

Card 1/1 (pl)

0945

1546

